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Abstract

THE FUTURE ROLE OF ARMOR IN CENTRAL-EASTERN EUROPE by CPT(P) Gabor Lorincz, HUNGARY, 51 pages.

The Armor branch has been the most controversial branch since its appearance. Military thinkers predicted the obsolescence of the weapon system many times, however history proved that the tank is not only viable but also very effective both in the maneuver centric and in the attrition based military cultures. It seems since the end of the Cold War the armor community has had identity problems caused by the events and the triggered military solutions of the last ten years. Low-intensity conflicts, domination of urban and restricted areas in warfare and peace operations pushed tanks to the background. The advocates of armor are continuously trying to prove that tanks are still the most effective weapon systems given the appropriate mission in a well-constructed organization with a good doctrine. Nevertheless, what is the situation in Central-Eastern Europe (CEEU) where the small nation states have focused on peace operations for years and see their sovereignty granted primarily by the NATO membership? The current transformation of the US Army and the unification process of Europe may convince these countries to get rid of their (partially outdated) heavy equipment. On the other hand, because of a thorough threat analysis these states may find it necessary to keep and even develop their armor forces – as the security status of the region requires.

This monograph seeks to identify whether the tank remains the primary tool for high intensity, homeland defense operations at the operational level of war for Central-Eastern European Countries. This study discusses the threat assessment of the region, the different arms control treaties, and the CEEU optimal force structure. The monograph examines the relations to NATO, EU and the regional interests because these issues also determine the force needed for self and mutual security. Furthermore, the research identifies the factors that support or hinder operations with heavy forces, especially with tanks (weather and terrain, infrastructure, economy, existence of weapon manufacturing, and political pressure). After the need was identified, the next step was to determine whether the current technology meets the requirements established by the necessary capabilities.

The monograph reaches three conclusions. First, the security status of the region still requires the presence of heavy armor. Second, the CEEU countries should integrate those capabilities that are currently branched out to meet the NATO standards and those able to conduct homeland defense operations. Third, the Central-European region should not automatically adopt the weapon systems of global powers, but come up with its own weapon design or contribute to the common European development efforts in the distant future.

The Future Role of Armor in Central-Eastern Europe

**A Monograph
by
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CHAPTER ONE

INTRODUCTION

“The heavy prevail over the light”¹
Sun Tzu

Background

Ferenc Juhasz, the Hungarian Secretary of Defense stated in September 2002 in one of his media interviews that in his opinion the countries' heavy equipment (armor, artillery) should be phased out in favor of light, rapidly deployable forces². Two months later the Hungarian Prime Minister added: “... The Alliance does not need heavy forces any more but modern surveillance and information technology, huge transport air assets, up to date NBC detection and defense capability...”³ What is the reason for these statements? Among others, it may be the changed state and focus of security throughout the world after September 11, 2001, the increased costs of the Defense Forces' transformation, the North Atlantic Treaty Organization (NATO) and European Union (EU) expansion and the optimism of the political leadership; but the statements are difficult to justify.

The Armor branch has been the most controversial branch since its appearance. Military thinkers predicted the obsolescence of the weapon system many times, however history proved that the tank is not only viable but also very effective both in the maneuver centric and in the attrition based military cultures. It seems since the end of the Cold War that the armor community has had identity problems caused by the events and the triggered military solutions of the last ten years. Low-intensity conflicts, domination of urban and restricted areas in warfare and peace operations pushed tanks to the background. The advocates of armor are continuously trying to

¹ Sun Tzu, *The Art of War* (Oxford University Press 1985) 104.

² TV interview with Ferenc Juhasz, the Hungarian Secretary of Defense. Source: www.honvedelem.hu/sajtotukor/2002augusztus (The official website of the Hungarian Ministry of Defense).

prove that tanks are still the most effective weapon system given the appropriate mission, a good organization and viable doctrine. Nevertheless, what is the situation in Central-Eastern Europe (CEEU) where the small nation states have focused on peace operations for years and see their sovereignty granted primarily by the NATO membership? The current transformation of the US Army and the unification process of Europe may convince these countries to get rid of their (partially outdated) heavy equipment. On the other hand, because of a thorough threat analysis these states may find it necessary to keep and even develop their armor forces – as the security status of the region requires.

Structure

The purpose of this monograph is to examine whether armor will have a vital role in the first half of the 21st century in CEEU, (which has been transforming politically, economically and militarily since 1989) or will the currently ongoing worldwide transformations marginalize tanks and armor tactics. This paper uses security, capabilities, and technology to identify the need for the weapon system in the region. The first area is the current and the predicted, future security status of the region. This security analysis identifies the second area - capabilities required for homeland defense (HLD) purposes and for participation in NATO missions. The third area is technology that will inevitably play a major part in future operations. The goal of the examination here is to identify how the technology corresponds to the defense capabilities required by the security status of the region and how future tank development will affect CEEU countries.

Chapter 2 is a threat and security analysis of CEEU. This examination provides the most important evidence for the future status of the weapon system. The analysis includes the comparison between the NATO and non-NATO countries' situation in the region, and the factors - the pros and cons of future tank use. Chapter 3 deals with future developments; how other major powers (US, Western European countries, Israel, Russia) plan to develop, change or reduce the

³ Interview with the Hungarian Prime Minister, Kossuth Radio Reggeli Kronika, 21 Nov 02.

armored units in their respective armies and – more importantly – how these trends will affect Central-Eastern Europe. The goal here is to identify the potential changes in the region. Chapter 4 includes a synthesis, conclusions and recommendation for Central-Eastern Europe. The recommendation will include the potential future operational employment of armored forces determined by the security status of the CEEU states and the current lines of tank development.

Definitions

To clearly understand the findings in this monograph, it is essential to develop a common understanding of the following terms:

Armor is used as a synonym of the tank. A light, medium or heavy (20-80 tons) fully tracked armored vehicle with main characteristics of mobility, armor protection, firepower, and shock effect. The purpose of the tank is to close with and capture or destroy enemy forces and seize or retain terrain by executing maneuver. Most tanks have a turret but it can be turret less as well.

Security is a condition that results from the establishment and maintenance of protective measures that ensure a state of inviolability from hostile acts or influences.⁴

Capability is a characteristic; having abilities, skills, and qualities necessary for achieving something.⁵

Technology is the application of the science to industrial or commercial (in this case military) objectives.⁶

Doctrine is an application of a theory, or fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application.⁷

⁴ *Joint Publication 1-02 Department of Defense Dictionary of Military and Associated Terms* (CD-ROM, Joint Electronic Library, 2000) 427.

⁵ *Webster's New World Dictionary*, 3rd Edition "capability" (Simon & Schuster Inc 1995) 89.

⁶ *Ibid*, 606.

This paper refers to the *heavy weapon systems* as follows: Self-propelled (SP) artillery guns, howitzers and multiple launched rocket systems (MLRS) 122mm and above, tanks with 100mm bore and above, infantry fighting vehicles (IFV), heavy engineer equipment other than construction (e.g. assault bridge) and the recovery vehicles of these systems.

CHAPTER TWO

SECURITY

The CEEU region has been in dynamic change for the last decade. The “velvet revolutions”⁸ in 1989-1991 and the measures taken with politics, economic development, and military affairs resulted in democratic countries. These countries once more found their deserved place amongst the European societies. Three of these countries made it to the NATO in 1999, seven others are on the list of the second tier of expansion. What is more, negotiations are ongoing about the first course of the EU enlargement with 10 countries. It seems the optimism of the leaders of CEEU countries is appropriate but the concern is whether these countries are able to unify their efforts to completely integrate into the EU and whether there is a possibility of any extreme ethnic, nationalist or other national-regional interest that could pose a threat to the countries of the region. This paper refers to the region as those countries, which belong to Central Europe and Eastern Europe because “regions are more often constructs of the mind than of objective geography.”⁹ Before analyzing the facts that contribute to the state of security of the CEEU countries, the region of Central-Eastern Europe needs to be identified.

⁷ *Joint Publication 1-02 Department of Defense Dictionary of Military and Associated Terms* (CD-ROM, Joint Electronic Library, 2000) 162.

⁸ “Velvet Revolutions”: The bloodless revolutions happened in Poland, Czechoslovakia and Hungary. In Romania, the people executed the top-level leadership but the revolution finished quickly. The loser of the changes was the former regional power Yugoslavia, when various nationalist and ethnic agendas clashed and won over the peaceful settlement. Source: Weisberg, Jacob: “*Crushed velvet: Vaclav Havel's velvet revolutions.*” The New Republic 1990, vol. 202 #10. p.42.

⁹ Andrew H. Dawson, *The Changing Geopolitics of Eastern Europe* (Frank Cass, London 2002), 51.

Where is Central Europe?

The present picture of Central and Eastern Europe is a result of three historic events. The first one is the Versailles peace treaty that redrew the borders of the region disregarding ethnic and true national borders and planting the seeds of current nationalist and separatist movements. The second one is the outcome of WWII whereby the whole continent rapidly partitioned into Eastern and Western Blocs. The third one is the collapse of the communist regimes in the region followed by the self-identification of nation states.¹⁰ In the course of history, the Western border of Europe ran at the eastern edge of Prussia and Austria-Hungary where there was no “middle” or “center”. Following WWI and the Polish – Russian war of 1920-21 most people were part of one of the nation states that had emerged from the collapse of the imperial powers – with all the controversies and disadvantages – but the East-West borderline barely changed. This line moved to the West significantly with the Cold War and became a demarcation line for the next half decade.

So where is Central and Eastern Europe? The geographic Europe lays from Portugal to the Ural Mountains. If one cut this fictitious line in half the perpendicular line would go through Estonia, Latvia, Lithuania, Belarus, Ukraine, Romania, and Bulgaria.¹¹ Although it is the center geographically, according to geopolitical considerations it is the East. Most Polish, Czech, Slovak and Hungarian intellectuals would recognize the existence of a cultural and historical boundary, which for many would be located to their east. Perceiving their nations not only as having participated in, but as also contributed to, the principal historical developments of European identity –the Renaissance, the Reformation and the Enlightenment – they would see themselves as being an organic element of Europe for the last 1000 years.¹² In addition, Western European

¹⁰ Ibid, 52.

¹¹ See Appendix ‘A’ (The Geographic Map of Europe).

¹² Andrew H. Dawson, *The Changing Geopolitics of Eastern Europe* (Frank Cass, London 2002), 4.

(WEU) countries tend to forget about the 'small favor' of repelling the invasions of Tartar and Ottoman hordes and letting WEU countries prosper by that.

However, others also proposed different boundaries, including that between western and eastern Christianity.

1. For Samuel Huntington this border represents a key world faultline, dividing two 'civilizations'. In accordance with this criterion, western Christian Europe includes the Baltic States, the western parts of Belarus and Ukraine, at least the northwestern part of Romania, together with Slovenia and Croatia.¹³
2. The Jane's Sentinel Security Assessment lists Slovakia, Czech Republic and Poland as the only countries in Central Europe and deals with Hungary as a part of the Balkans.¹⁴
3. The immediate response of self-identification for the failure of the communist regime was the Visegrad Cooperation.¹⁵ Having the logical claim to rejoin the European community: "Despite obstacles and very much in the face of them, Visegrad cooperation has a discernible membership and makes the best claim to defining Central Europe."¹⁶

The exact definition of the region is difficult because it lacks natural frontiers and it has usually been the shatter-belt between major empires. Rather than having an identity of its own, it has at best been defined as 'the lands between'.¹⁷ For the security analysis, it is not enough to examine the countries in Central Europe; the area needs to be extended to the East. It is feasible to except Huntington's definition about Western Christianity because the overarching issue is

¹³ Samuel Huntington, *The Clash of Civilizations and Remaking of World Order* (New York: Touchstone Books 1996) 54.

¹⁴ *Jane's Sentinel Security Assessment: The Balkans* (Sentinel House, United Kingdom 2001).

¹⁵ In 1989 Poland, Czechoslovakia (later Czech Republic and Slovakia), and Hungary started to work out an initiative, a close cooperation in Visegrad (Hungary) with a purpose of getting into the NATO and ultimately into the EU together, by unifying their political, economical, and military efforts. The creation of the Central European Free Trade Agreement in 1991 (CEFTA) was a cornerstone in this cooperation.

¹⁶ Andrew H. Dawson, *The Changing Geopolitics of Eastern Europe* (Frank Cass, London 2002), 66.

¹⁷ *Ibid*, 49.

how (if at all) those *countries that align with the western values* would achieve their ultimate goal, the reunification with the European societies.¹⁸

Security Risks - The Threat

*"There is no such thing as a 'realistic' threat estimate; apart from the factual unknowns and the uncertainties of war there are the cost variables: how great a risk is to be accepted, how many casualties sustained in order to defeat a given threat? In practice an overestimate may simply reflect a low tolerance for casualties."*¹⁹

Why do we need to address any risk in the region when most of the former socialist countries applied for either NATO or EU membership, or both? The answer is because of the lack of confidently predictable long-term political and economical stability and because of the present but sometimes ambiguous agendas concerning regional foreign policy. Economic stability exists predominantly in those countries that are internally and externally secure. Continued economic stability requires a strong political base. For the threat assessment in the region to be complete, the examination needs to cover the following relationships: the West – CEEU, the East-CEEU, and CEEU internal.

The West – CEEU relationship, uncertainty of the future role of NATO

With the first tier of the NATO enlargement, the western and Atlantic states proved they were committed to integrate those who were willing to live by their standards. The membership of Poland, Czech Republic and Hungary made it clear for everybody that NATO needed to transform from its cold-war role to something else. The tragic events of September 11, 2001 and the invitation of another seven countries into the Alliance at the Prague Summit did not clear the ambiguity of the future role of NATO. Other than not having common military capabilities in the Alliance, it is clear now that the European and Atlantic interests often differ. This difference was

¹⁸ See Appendix 'B' (The CEEU)

¹⁹ Edward N. Luttwak, *The Israeli Army* (University Press of America, 1983), 169.

noticeably reflected in the NATO Summit (Prague, December 2002) where France and Germany tried to strengthen the EU structures dealing with NATO as an issue with secondary importance. Just like in 1999, the enlargement looked suspiciously like what a critic of the expansion called U.S. foreign policy as social work.²⁰ The State Department's talking paper published for the 1997 conference was in fact a denial of this opinion because it stated that the Alliance did not enlarge NATO for geopolitical reasons since there were no compelling strategic interests at stake. It was a democratization policy that provided the needed stability for greater economic development in CEEU that would generate new trade and jobs at home.²¹ In 2002, geopolitical interests motivated the expansion without doubt: to separate Europe from those territories – for example from Russia, Ukraine – which can not yet be part of the transatlantic alliance. These countries can connect to Europe at most by a special relationship (Partnership for Peace [PfP] and other bi- and multilateral agreements). This geopolitical standpoint is one of the few, which serves both European and Atlantic interests as well. Washington wants to make sure that NATO will be able to handle key areas near the centers of possible conflict (Caucasus, Middle-East).²² Also the EU felt benefited from the decisions made in Prague because – especially as the German and the French governments hope – a diluted NATO would not obediently adjust to the U.S who aggressively pursued its global interests. The conference could not redefine NATO's role, therefore it was not declared that the future role of the Alliance was to provide the common European and Atlantic security.²³ The fiascos of the Summit showed the existing conflicts between EU and U.S. interests. This conflict between the major powers worried the CEEU countries, because they tied their internal stability to the economical advantages of the EU's

²⁰ Michael Mandlebaum, "Foreign Policy as Social Work" *Foreign Affairs*, Vol LXXV, No.1, January-February 1996, pp.16-31.

²¹ Stephen J. Blank, "Rhetoric and Reality in NATO Enlargement" *European Security and NATO Enlargement: A view from Central Europe* (Strategic Studies Institute, U.S. Army War College, 1998)15.

²² Ibid, 17.

²³ <http://www.nato.int/docu/comm/2002/0211-prague/index.htm>

integration.²⁴ Probably most people think if the CEEU had to choose which to finance first, the integration or the intention of the transatlantic alliance pursuing global aims, the answer would be the previous one.²⁵ In addition, what they saw was that the French, the Italians and the Belgians firmly refused the global role of the NATO and declined to include in the closing statement that 'NATO fends off every attack wherever it would come from'.²⁶ On the other hand, the governments of CEEU are aware of the EU's indecisiveness²⁷ and they feel indebted to the U.S. since the list of the invited countries into NATO was put together in Washington, rather than in Brussels.²⁸ The U.S. took the lead in the PfP program and helped the new and the future members to catch up with the developed armed forces.²⁹ The CEEU leaders tried hard to avoid the consequences of the collision of these different interests; as the Hungarian Prime Minister said in December when he visited President Bush: "What we want is not less America but more

²⁴ These advantages are not constant. The switching to the Euro (as a crucial part of the unification process) had a declination effect on most of the economies of the EU members, who adapted the common currency. Source: Interview with Col. Rainer Waelde, Advanced Operational Art Studies Fellow, German Army.

²⁵ The events happened in a different way. The declaration of the nine countries about their support to the President of the United States (POTUS) for the war against Iraq (five of them CEEU countries) proved that the region values the support of the U.S. This difference in interests made clear that the EU countries do not have a common policy stance on this issue. This served as a warning that a similar case could divide Europe in the future as well.

²⁶ www.nato.int – the NATO official website.

²⁷ The inability to decide and intervene in the Balkans is a long-lasting shame for the major powers of the EU, who had the financial and military means if not to prevent at least to minimize the violence.

²⁸ The opposition of Germany, France, and the U.K. to accept the first three new NATO members was high in their respective countries, 45-55% of the population opposed the enlargement of NATO in 1997's poll. On the other hand, in the U.S. only 10% of those questioned could name at least one of the applicant countries and only 5% followed the enlargement issue. Source: Robert H. Dorff, *NATO after enlargement: New Challenges, New Missions, New Forces* (Strategic Studies Institute, U.S. Army War College, 1998).

²⁹ The U.S. was the first to integrate a brigade from a CEEU country under NATO ACE Rapid Reaction Corps (ARRC) command. The Hungarian 25th Mechanized Infantry Brigade has been TACON to the 1AD since Dec 1999. Also hundreds of officers and NCOs from CEEU have been studying since 1993 in various courses in the U.S. for free (from IMET fund).

Europe.”³⁰ For the new and future members the challenge of successful integration included 3 major considerations: costs of the increased military expenditures coming with the NATO membership, this clashed with the costs of joining the EU, and both of them clashed with economies that showed steady development but are still mediocre institutionally and socially.

Thus, what can CEEU countries expect in the Alliance and what do the old members expected them to contribute? As the facts showed above this is not that unambiguous and the problem comes from deeper than the clash of European-Atlantic interests and regards to the changing role of NATO, whose transformation seems to be behind the power curve. After the terrorist attacks of September 11, it was clear that the original text and meaning of Article 5 needed to be reinterpreted by the member states. The original idea developed for the Cold War no longer fit anymore within the changed political, military and economic circumstances of the expanded Alliance.³¹

*“The parties agree that an armed attack on one or more of them in Europe or North America shall be considered an attack against them all, and consequently they agree that, if such armed attack occurs, each of them, in exercise of the right of individual or collective self-defense recognized by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually, and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area...”*³²

³⁰ Peter Medgyessy, the Prime Minister of Hungary made the statement during his visit to Washington D.C., December 2002. Source: www.honvedelem.hu - the official website of the Hungarian Ministry of Defense.

³¹ Although Article 5 was called upon by the European states, the U.S. decided to tackle the issue alone with some British help. Part of it could be the national pride, but probably the lack of the common NATO capabilities to operate together with U.S. forces decided the question. (Source: Jane's Foreign Report “Bush Plans to Reform NATO: An Exclusive Report on a Radical Idea” Online service 03 Oct 2002 <http://www.janes.com/foreignreport>) The other recent example is the Turkey-case, when Germany, Belgium and France initially did not want to provide help under Article 5. The Treaty is 54 years old; the formulation and wording expresses the Cold War political environment. The mismatch between the old treaty and the altered political situation can cause ambiguity and provides opportunity for different interpretations.

³² Article 5 of the North Atlantic Treaty, *NATO Handbook* (NATO Office of Information and Press, Brussels 2001), 528.

Security experts say that Article 5 does not provide perfect defense because it is not an obligation of automatic assistance by member states.³³ In case of an armed attack against any member state, the others would take actions “individually and in concert” to restore and maintain security. In other words, NATO will – by consensus – select the countries and decide what ways and means need to be used to defend the state under attack. Theoretically, it is possible that no consensus is reached on joint actions.

The conditions of the article are also vague. The term “armed attack” as defined in Article 5 means a seizure attempt of sovereign territory and an attack against the forces, vessels, and aircraft of the Parties because of the Article 6 clause.³⁴ This definition would have probably worked in the simple, bipolar past but does not anymore in the multiple-interest present.

Two recent developments do not simplify the problem, either. The US Secretary of Defense (and later the President of the United States) suggested at the end of September 2002 that NATO needed to create a rapid response force, which would only consist of willing contributors, who allow their forces to operate outside the EU.³⁵ The proposal was intended to solve the unanimity and the consensus of 26 countries when voting on deployment issues and put aside the debate about the global or regional role of NATO. The NRF could be used in and outside of Europe and at the same time, the U.S. would obtain this, relatively small (a JTF with approximately 20.000 personnel) but mildly effective unit.³⁶ It is predictable that CEEU countries will marginally

³³ Laszlo Valki, “Hungary and the Future of European Security” *European Security and NATO Enlargement: A view from Central Europe* (Strategic Studies Institute, U.S. Army War College, 1998)100.

³⁴ “For the purpose of Article 5, an armed attack on one or more of the Parties is deemed to include an armed attack: on the territory of any of the Parties in Europe or North America, on the territory of Turkey or on the islands under the jurisdiction of any of the Parties in the North Atlantic area north of the Tropic of Cancer; on the forces, vessels, or aircraft of the Parties, when in or over these territories or any area in Europe in which occupation forces of any of the Parties were stationed on the date when the Treaty entered into force or the Mediterranean Sea or the North Atlantic area north of the Tropic of Cancer. Article 6 of the North Atlantic Treaty, *NATO Handbook* (NATO Office of Information and Press, Brussels 2001), 528.

³⁵ NATO Response Force (NRF).

³⁶ The Declaration of the Prague Summit stated that the NRF will be formed and it needs to be operational by 2006. The real idea behind the NRF is that American leadership was not content with the

contribute to this organization in the near future because of interoperability, financial conditions and primarily political considerations (for example in Hungary 2/3 of the parliament has to approve any troop deployment abroad).³⁷ The other issue was the establishment of the EU Corps, which was part of the European Security and Defense Identity (ESDI). The agreement included the use of NATO capabilities and logistics and assets by EU units and close planning and information cooperation. The Corps and NATO forces were to avoid overlapping roles, therefore the EU only would commit itself where coalition NATO forces were not available.³⁸ Since European countries do not enlarge the size of their armies but create more defense organizations (ESDI, Euro Corps) increasing numbers of military units may wear multiple hats in the future.

These developments were closely tied together. The original Alliance did not seem to be good enough for either the Atlantic or the European party. These indicators showed that NATO as a whole, might not be as viable as it used to be and cease to be a fully integrated decisive power if the European and Atlantic interests continue to further deviate. In the future, with the formation of the NRF, Americans can expect a useful contribution from the European part of NATO while EU focuses more on its own issues by putting different hats on the same force. Many of the military assets pledged to the EU Corps are the same ones, which were pledged to NATO. The NATO member CEEU countries received an invitation to work together and take part in EU planning even if they were not yet EU members. CEEU governments understood – and the Prague Summit made it clear – that the security of Europe did not conclude with the defense of

significance of the EU support in the war against terrorism. Therefore, NRF would consist of mostly European assets to support the US efforts in the global war on terrorism. Source: <http://www.janes.com/foreignreport> Posted: 03 Oct 2002.

³⁷ Similar political control mechanisms exist in the other CEEU countries as well regarding the foreign service of national units. Source: personal interviews conducted with International Officers studying in the CGSC.

³⁸ The EU forces will focus on peace operations; they are going to take over the SFOR and Amber Fox in Macedonia in 2003 allowing U.S. force withdrawal from the Balkans. Source: www.nato.int

the national or the Schengen³⁹ borders. The conflicts and the stability challenges of the future must be dealt with on the spot to prevent them from escalating and impacting on the EU region. It was hard to make the CEEU citizens understand that their national military may have to execute missions regularly outside the borders. Thus, the CEEU politicians created a new slogan: "The homeland defense starts abroad."⁴⁰ This statement means a new approach to the foreign policy in the CEEU. The Prague Summit made clear that even the small countries have to participate more actively in the conflict escalation prevention and humanitarian missions.

Summarizing, the relationship between the West and the CEEU states have continuously improved since the western societies committed themselves to assist the reintegration of the countries in the region. Security wise the goal was a big and strong EU with a common value system in which the joining countries would become equal partners. The other important factor was the decision to abolish the internal borders in the future (as a result of the Schengen border expansion) to resolve the centuries old minority disputes. The catching up process carries a few risks for stability but these are mostly predictable, therefore the parties can work them out by developing a crisis management framework. The West – CEEU relationship is a benign driving force for future security developments.

The East – CEEU relationship

In this part, the first task is to define the East, because similarly to the CEEU area it is not clear. For the current examination, the East consists of the former member states of the Soviet

³⁹ France, Germany, Belgium, Netherlands and Luxemburg to abolish the internal border between them and establish a common border as the perimeter of the "Schengen area" signed the agreement originally in 1985. Later more countries joined the agreement and the Schengen Area now includes the countries of EU. The members established serious measures to protect the EU border, such as: tax and custom policy, criminal and refugee information system (SIS), and VISA enforcement for outsiders coming into the region. As the EU expands in the near future, the Schengen borders will move East-Southeast and the new member countries will be on the frontier, therefore they will have to enforce agreed upon measures. This could cause several problems, as a new country would have to require a VISA from her own minority groups living outside the Schengen border. This phenomenon could be very controversial in that region and would work against the regional stability until at least the current NATO nominees get in.

Union (without the Baltic States), Bulgaria and Turkey. The main players are Russia and Turkey, who have interests in the Balkans and in the CEEU region. The major concerns in the East-CEEU relationship are the relations with Russia, the eastern security risks, and the future economic possibilities.

Coldness was the main characteristic of the East – CEEU relationships until now. There were several reasons for this coldness in regards to Russia. The historical and psychological heritage of the former communist regime, the fear of Russia's possible future agendas ('The Empire Strikes Back'), the Russian financial debt to the CEEU countries, different claims and debates about the harm and loss Soviet forces caused during the 45 years of occupation and last but not at least the invasion of various organized crime gangs.⁴¹ In addition to these factors, the intension of the CEEU countries to join NATO did not make Russia comfortable as they saw an expanding NATO as a threat to their regional interests. The first improvement in the relations occurred with the Founding Act that established a new starting point for the international relations and meant a green light for the future negotiations regarding NATO expansion.⁴² The signature of the Act happened just in time because Russia started to reestablish close ties with her former states – the Commonwealth of Independent States (CIS). This reestablished close relationship worried the CEEU nations in the region. In fact, all of the former states depend on Russia in some way. In several states, the official language is either Russian or bilingual (Russian and national) because of the century-long cultural suppression. In 1997, Belarus and Russia announced their confederation. Russian relations were very close with Ukraine as well, but Ukraine increasingly

⁴⁰ The Hungarian Minister of Defense, Ferenc Juhasz made this statement several times when he explained the developments of the transition of the HDF. Source: www.honvedelem.hu

⁴¹ Russia still owes Hungary over \$ 400 million, and keeps the collection of the Sarospatak library, which was taken out of the country at the end of the WWII. Source: MTI - the official Hungarian news agency

⁴² In May 27 1997, NATO and Russia signed the Founding Act in Paris officially announcing that they do not consider each other as adversaries and they would cooperate in security issues. Although there are different interpretations of the Founding Act, as the current developments show it was ultimately a valuable initiative.

tried to open discussions with the CEEU and the West while at the same time wanted to keep its traditional (and necessary) relations with Russia.⁴³ The CIS are in the delicate matter of trying to appeal to western capital without violating Russian security interests.

Real eastern security challenges for the CEEU countries are few. Three potential sources of conflict are the Kaliningrad Oblast⁴⁴, the debate over Moldova⁴⁵, and the unrest of different nationalities in the Caucasus area. The Russian proposal of establishing a corridor from Russia through Poland to Kaliningrad really upset the Polish government, who compared it to that ill-famed solution of the Weimar Republic. Kaliningrad Oblast caused enough problems for Poland besides security because this area is a center of organized crime focused on East-West narco-trafficking. Unless either of the parties pursued the issue aggressively, long-term stalemate was predictable.⁴⁶ The Moldavian situation was more difficult. After the full-scale civil war in 1992 the hostilities ended but the country was still torn apart by three political agendas. There were two separatist groups based on ethnicity. The minority (Slavic population) sought a reunification with Russia similar to Belarus. The major ethnic group (non-Slavic Romanian) wished to join Romania. The third group wanted to keep the state independent. Since NATO invited Romania to

⁴³ Ukraine visited the NATO summit in Prague and was invited by the Visegrád Four (Hungary, Slovakia, Czech Republic and Poland) to observe and participate in some aspects of their framework. *Russian National Security: Perceptions, Policies and Prospects* (The U.S. Army War College, 2001), 120.

⁴⁴ Kaliningrad used to be in the German territory of East Prussia. It was part of the Weimar Republic before the WWII. After the war, the Soviets annexed it to Russia. With the collapse of the USSR, Lithuanian independence cut off Kaliningrad from the rest of the Russian Federation. For many years Poland, Lithuania, Germany and Denmark tried to persuade the Russian government to demilitarize the region and allow it autonomy. Despite some positive steps such as withdrawal of Army and Air Force units, Russia strengthened her military presence in Kaliningrad as an answer to NATO's eastward expansion. Autonomy, as the Russian Baltic Republic was refused in 1993 and 1998. Source: *Jane's Sentinel Security Assessment: Central Europe & the Baltic States* (Sentinel House, United Kingdom 2001), 155.

⁴⁵ Before the WWII Moldova was a part of Romania. The state became part of the Soviet Union at the close of World War II. Although independent from the USSR since 1991, Russian forces have remained on Moldovan territory, east of the Dniester River supporting the Slavic minority population, mostly Ukrainians and Russians, who have proclaimed a 'Transnistria' republic. Source: <http://www.lupinfo.com/country-guide-study/moldova/moldova44.html>.

⁴⁶ *Russian National Security: Perceptions, Policies and Prospects* (The U.S. Army War College, 2001), 90.

the Alliance, any kind of annexation was out of question, the more so since it would provide a precedent for other states and proliferate similar ideas. These ideas are unwanted because in Europe almost every nation has something to claim historically. The goal for a secure political environment is neither tiny states that are incapable to function nor annexations and expansionist intentions but stable nation states with prosperous economies and steady political systems.

The other significant security consideration of the East is the Caucasus area. The local conflicts, the aftermath of Operation Anaconda in Afghanistan and the overwhelming western interests for extracting the region's oil wealth put Russia in a strategic defense.⁴⁷ Since the Secretary of NATO (Javier Solana) paid a visit to Caucasus in 1997, it has been officially acknowledged that the region became a key component in the American and European security planning.⁴⁸ Because of the growing interest of the western oil companies and as an effort to stop nuclear proliferation the US and the UN put increasing pressure on Russia to solve some of the issues in the region.⁴⁹ The Caucasus traditionally belongs to the Russian zone of influence and President Putin's administration is certainly not comfortable with allowing western forces to come and stay there. Another concern includes the issue of depleting resources. Russian thinkers and military leaders believe that the West wants to take advantage of them.⁵⁰ On the other hand,

⁴⁷The Russian-Chechen conflict, the Armenian-Azeri border dispute, the alleged Georgian support of Chechnyan guerillas, the suspected presence of Al-Quaida members in the area makes the region unstable with high security risks. Racial, religious, economic and independency issues are there together. Source: *NATO after enlargement: New Challenges, New Missions, New Forces* (Strategic Studies Institute, U.S. Army War College, 1998), 151.

⁴⁸ Javier Solana made the following statement during his visit to Baku in 1997: "The Caucasus is an important region for Europe, which has enormous social and economic potential. Europe will not be completely secure if the countries of the Caucasus remain outside European security." Source: *Ibid*, 151.

⁴⁹ There are 8 NATO countries present in the region having increasing interest in the oil business. Such as: British Petrol (GB), Amoco (US), Exxon (US), Conoco (US), Mobil (US), Pennzoil (US), Chevron (US), Elf (F), Total (F), Petrofina (P), Deminex (GE), Statoil (N). Source: *NATO after enlargement: New Challenges, New Missions, New Forces* (Strategic Studies Institute, U.S. Army War College, 1998), 158.

⁵⁰ "It is already obvious that the West tries to assign Russia the role of supplier of raw materials, and a dumping site for industrial wastes, but the people of Russia cannot submit to this." General M.A. Gareev, *If War Comes Tomorrow?* (Frank Cass, London 1998), 26.

the oil reserves are calculated to be 71% of the world's oil and 33% of the world's natural gas reserves.⁵¹ It is strategically important for all the participants: Europe, the U.S., the Russians, and Turkey. The American-Azeri AICO Main Export Pipeline (MEP) could break the Russian monopolies of transporting oil and gas from the East to Europe.⁵² It would allow primarily the CEEU economies to turn to alternative solutions of energy purchase, because currently CEEU is heavily dependent on Russian fossil energy.⁵³ Currently neither party can take full advantage of the above-mentioned economic opportunities because of the unstable security environment of the Caucasus region.

As far as nuclear proliferation is concerned, the worries are understandable. A significant portion of the former Soviet Union's nuclear infrastructure is situated throughout the Caspian region (nuclear research reactors, power reactors, and uranium mine processing plants)⁵⁴. The UN and NATO (PfP program) monitor these facilities to prevent any future nuclear aspirants from obtaining weapon grade materiel.

The East – CEEU relationship is changing. Turkey traditionally has good relations with the CEEU and at the same time makes efforts to maintain stability on the Balkans where the country is still influential, especially between the Muslim communities. Bulgaria similarly to other former Warsaw pact countries became a NATO member. Russia is making closer ties with NATO in the war of terrorism. With the NATO expansion, the Russian perimeter of forward defense is shrinking together with her sphere of influence. The politically and economically freed up CEEU

⁵¹ *NATO after enlargement: New Challenges, New Missions, New Forces* (Strategic Studies Institute, U.S. Army War College, 1998), 175.

⁵² AICO-Azerbaijan International Operating Company. The company is 40% American owned. Source: Ibid, 153.

⁵³ During the Cold War, the socialist countries received their oil and gas using the famous "Friendship" pipeline coming from Russia. After the Cold War the infrastructure stayed in place and the Russian oil was still more accessible than the Arab.

⁵⁴ *NATO after enlargement: New Challenges, New Missions, New Forces* (Strategic Studies Institute, U.S. Army War College, 1998), 165.

countries are turning to the East again looking for (primarily Russian) markets lost in the early nineties. Russia had to suffer the shock of devolving back to a regional power from a global power. Security issues may depend on the process of how the West deals with her worn national-imperialistic pride. The future goal should be balanced relations and a slow but inevitable European integration because Russia is a natural bridge from East to West.⁵⁵ As the world's future conflicts will predictably happen between religious and cultural borders, Russia will hopefully take a role in Europe's Eastern forward defense.

The CEEU internal relationship

The relation of the CEEU countries to one another is two fold. First, it is determined by century-old disputes over national borders and minorities. All the states in CEEU have something to claim as a result of the peace treaties in the 20th century. The other aspect determining this internal relationship is the well-understood common interest of rejoining the European democratic community.

After the Velvet Revolutions, the collapse of the Warsaw Pact and the Soviet Union the CEEU countries initially focused on their internal stability, the establishment of the basic, democratic political system (multiple party system, free elections, and free media) and the conversion to a market economy. Having limited or no experience in capitalist governing, the transformation was not smooth; this was especially true of the economy, which declined steadily. One of the most difficult tasks was the alteration of the social institutions; in some cases, it is still an ongoing mission.⁵⁶ These effects had a cumulative effect on the living standards and by the mid nineties most people considered themselves poor or below the average income.⁵⁷ The

⁵⁵ Samuel Huntington, *The Clash of Civilizations and Remaking of World Order* (New York: Touchstone Books 1996) 163.

⁵⁶ Taking the Hungarian socialist experience: everybody had a right to receive free education and health care but at the same time everybody had to work, it was strictly mandatory.

⁵⁷ Source: The Gallup Institution <http://www.gallup.hu/Gallup/self/polls/nepszava/nepszava9.html>

economic declination coincided with the awakening of national pride and agendas (versus the former socialist international concept) where people tried to prove and justify the greatness of their nation by historic events.⁵⁸ From here, it is just a step to find a common threat, which is responsible – directly or indirectly – for the current domestic problems. This is what started to happen in CEEU. The failure of Yugoslavia as a state was a clear warning for the neighbors in the region. The former Warsaw Pact states were on their own in an unstable environment. The countries were to spend fortunes on their respective national defense forces that might not even match the possible threat. That is why the CEEU countries primarily applied for the NATO membership - to get under a security umbrella, however the democratization process (secure environment for western investments, anteroom of the EU) was also important.⁵⁹ The Visegrad initiative is a good way to gather countries with the same interest but it does not provide security guarantees. The first tier of NATO expansion solved some of the issues for those, who got in but did not please the rest of the applicants and maintained the risk that the rejected countries would find another way to develop security measures (for example building an alliance with a Russian lead). The second tier brought almost all the CEEU nations together but at the same time worked against its own strength to be decisive. The effectiveness of the political decisionmaking process involving 26 countries is questionable at a minimum, not to mention the common military (combat) capabilities. Because of the conflicting interests between the Atlantic and European part of NATO the alliance may lose its viability as primarily a security organization and becomes a pool of countries with a similar value system. Or, as Article 13 allows, NATO may cease its own existence.⁶⁰ It probably sounds extreme, but the collapse of the Soviet Union or the downfall of

⁵⁸ The history of the CEEU in the nineties is rich in political conflicts aiming different minority issues, especially concerning the education and other rights. Source: www.hirek.mti.hu/archiv/1990 (The official Hungarian news agency).

⁵⁹ Laszlo Valki, "Hungary and the Future of European Security" *European Security and NATO Enlargement: A view from Central Europe* (Strategic Studies Institute, U.S. Army War College, 1998) 94.

⁶⁰ "After the Treaty has been in force for twenty years, any Party may cease to be a Party one year after its notice of denunciation has been given to the Government of the United States of America, which will

Yugoslavia would have sounded as extreme just five years before their occurrence. The statement from General M.A. Gareev, the former Deputy Chief of the Russian General Staff stated that :

*"It is better to err in prediction than to yield to the impossibility of foreseeing the progress of military affairs."*⁶¹

The CEEU countries can suddenly find themselves in trouble, in case the 'impossible' happens, because their security mainly depends on NATO Article 5 mutual assistance. It may be even more so in the future, because during the Prague summit Dec 2002, the members decided to develop certain common capabilities. One proposed way to do this, that small countries like Hungary or Czech Republic would focus on one or two particular types of mission (e.g. NBC, MP, engineering) and when the Alliance needs this kind of service, they would go and execute the tasks in their respective area of expertise.⁶² This specialization means that national militaries would restructure emphasizing certain capabilities, neglecting others, relying on the other allied forces as needed. In case there is no political consensus over the use of force under the Articles of the Treaty or the alliance breaks up, these specialized defence forces are probably not capable of maintaining the sovereignty of their state.

The CEEU internal relationship is not fragile but it is not stable either. After the change in the political system the economic and political race between the countries (who gets in NATO and EU earlier, if at all) is a challenge. Historic disputes and minority issues increase the risk factor. The exclusion of any preparing country from these organizations could break the balance in relations.⁶³ If NATO lasts long enough to hold together the european (especially CEEU) nations throughout the tiers of EU expansion the Alliance will have existed to its purpose.

inform the Governments of the other Parties of the deposit of each notice of denunciation." Article 13 of the North Atlantic Treaty, *NATO Handbook* (NATO Office of Information and Press, Brussels 2001), 530.

⁶¹ General M.A. Gareev, *If War Comes Tomorrow?* (Frank Cass, London 1998), vii.

⁶² The ongoing Hungarian strategic review of the Defense Forces considers a similar course of action (COA) Source: <http://www.honvedelem.hu> (official website of the Hungarian MoD).

⁶³ Well Done, Your Majesty (Jane's Foreign Report, 20 Feb 2003) Source: www.janes.com/search97cgi/s97.cgi?action=View&VdkVgWKey=/content1/janes

Conclusion

The examination of the state of security for the CEEU countries brings up a few interesting points regarding the relationships with the West, the East, and internally.

While the CEEU countries have to pursue EU membership aggressively, they try not to get involved in the colliding Atlantic and European interests. Maintaining neutrality is important to keep good relations with all countries that are necessary for future developments. Because, the future of the NATO is ambiguous, it is risky to rely solely on the mutual defense of the Alliance outlined in Article 5.

1. The CEEU community needs to maintain and improve the relations with Russia, CIS, and Turkey but at the same time, it is important to find an alternate source of fossil fuel in addition to the Russian source. The countries of the region have to be aware of the regional problems and work to solve them. The best way to control the outbreak and escalation of crises is immediate NATO and / or UN presence in the earliest stage of a conflict.
2. The internal CEEU threat still exists under the surface. Great deal of security concerns depend upon economic productivity and the balance between national and regional interests. The faster and more effective the unification process of the EU, the more secure the region will be. Currently the states need defensive power to deter a possible adversary from a politically premature, aggressive behavior.

It is too early for the CEEU to enjoy the benefits of progressive change. In the CEEU there are capable national military forces whose weapons can bring devastating effect to the continent. The first Afghan war, Bosnia, Kosovo, Macedonia, Chechnya, Nagorno-Karabakh demonstrated to the rest of the world that even obsolete weapon systems are effective for those, who really want to use them. In the next chapter, the purpose of the examination is to identify what sort of security capabilities the state of the CEEU needs.

CHAPTER THREE

CAPABILITIES AND TECHNOLOGY

Chapter 2 concluded with the statement that the CEEU countries needed to keep, maintain, and develop their respective armed forces because of the existing security risks in and around the region. The question is, what kind of military capabilities do the CEEU countries need to be able to respond to future security challenges?

Although the defense forces in the region have been reorganizing since the early-mid nineties they are not entirely interoperable, or technologically compatible with the 'old' NATO forces. Those units that started participating in the PfP program and peace operations early on with NATO troops were in an advantageous situation, because the military leaders knew what directions to take for further improvements. After the first tier of the NATO expansion, the units in the best condition were assigned to NATO.⁶⁴ These units had priority in training and in modernization, and they were to work and train together with the assigned NATO higher echelon organizations, but their primary focus remained homeland defense. After the events of September 11, 2001, the focus changed. The military experience of the last decade, namely the Russia-Afghan war, the urban fights in Chechnya and Mogadishu, certain aspects of the First Gulf War, the air campaign against Serbia, the asymmetric threat of terrorism, the irregular opponents, and finally the lessons learned in Operation Anaconda demanded that NATO and especially the CEEU countries address their neglected military capabilities.⁶⁵ This is the point where the issue branches out. It is conceivable that the CEEU countries need different capabilities for NATO missions than for home defense purposes. For the individual member states, NATO missions focus assets abroad (as a member provides help to another country outside his own borders) while

⁶⁴ The Hungarian 25th Mechanized Infantry Brigade (heavy) has been under TACON of the 1U.S. AD as an ARRC element since 1999. Source: telephone interview with BG Tibor Nagy, who commanded the Bde at that time.

HLD – using the definition regarding exclusively the measures taken - deals with operations based in the domestic arena.⁶⁶ This paper will now focus on the different capabilities needed for NATO, and those capabilities needed for HLD missions.

Necessary Military Capabilities for NATO Operations

This section introduces the necessary capabilities for NATO operations and how the CEEU countries are able or unable to provide these to the Alliance. NATO missions are potentially power projections, when the members deploy to a place of conflict to put it to an end in accordance with an international political decision.⁶⁷ Recent missions include Bosnia (IFOR, SFOR), Kosovo (KFOR), and the follow-on operations of Operation Anaconda in Afghanistan.⁶⁸

1. Strategic Deployability. Major considerations of any power projection is to how to get into the theater fast, what kind of force structure is optimal for the required deterrent/lethal power, how big is the necessary logistic footprint, and how can continuous support be provided. Many areas of the American Army transformation are geared to solve these problems. Most CEEU countries do not have strategic airlift capabilities at all.⁶⁹ Rail transport is feasible and available but it is no help in case of a deployment outside the continent. Sea transport is slow

⁶⁵ The main topic of the Prague Summit was the needed capabilities of the Alliance. Source: <http://www.nato.int/docu/comm/2002/0211-prague/index.htm> .

⁶⁶ Here the definition regards exclusively the measures taken within the borders of a state. “ One definition of the HLD is the protection of ‘XY’ territory, sovereignty, domestic population, and critical infrastructure through deterrence of and defense against direct attacks as well as the management of such attacks.” Source: https://www.cnet.navy.mil/cnet/gmt/gmt03/1_5.pdf .

⁶⁷ NATO missions can be ordered under the Article 5 of the Treaty when the members act as a mutual defense force. In addition, NATO can execute peace operations given by UN resolutions. Chapter VI of the UN Charter discusses peacekeeping operations, whereas Chapter VII is about peace enforcement. Source: *NATO Handbook* (NATO Office of Information and Press, Brussels 2001) 339-342.

⁶⁸ The facts, details, information about participants can be found on www.nato.int/kfor, www.nato.int/ifor, and www.tfeagle.army.mil .

⁶⁹ There are ongoing negotiations in the Visegrad Initiative to establish a common strategic airlift capability for international, humanitarian and NATO missions. Source: www.honvedelem.hu/sajtotukor/januar

and most CEEU states are landlocked.⁷⁰ The current answer in CEEU is to establish common lift capabilities and offer forces light enough to be transportable easily (light infantry, medical, MP, NBC).

2. Precision engagement. The need to destroy particular objectives with the least collateral damage is becoming more important. Another consideration is the reduced logistic (storage and CL V) assets. To catch up at least in some areas the CEEU states are purchasing more technologically advanced weapon systems to replace the obsolete inventory and to achieve interoperability.⁷¹
3. NBC reconnaissance and protection. Because of the idiosyncratic threat environment and the proliferated biological and chemical weapons, the risk of a future employment of weapons of mass effect (WME) does exist. The CEEU region is up to date in the recon and analytic piece, but not all the countries have the most modern protection equipment.⁷²
4. Continuously maintainable logistic tail. The logistic support of a NATO mission is based on the National Support Elements (NSE) and mutual support. NSE provides those classes of supply that are not interchangeable or that the host nation cannot supply.⁷³ Internationally, the compatibility of the weapon systems and various types of equipment is one of the most important issues, because that is how the allies can mutually support one another. Having very limited current capabilities to provide national support to remote areas the acquisition of heavy transport assets is crucial. Nationally, important logistic considerations include limiting

⁷⁰ See Appendix 'A'.

⁷¹ The Polish army has recently purchased Leopard-2 A4 tanks for replacing a whole armor brigade. Source: www.janes.com/landforcesnews. The Hungarian Air Force signed a contract to buy 14 SAAB JAS-39 Gripen multi purpose aircrafts that are capable of air refueling and delivering precision weapons. At about the same timeframe the Polish Air Force ordered 48 F-16 aircraft from the U.S. Source: Official announcement of Ferenc Juhasz, the Hungarian secretary of Defense (MTI- The Hungarian News Agency, Feb 2002).

⁷² *Jane's Sentinel Security Assessment: The Balkans* (Sentinel House, United Kingdom 2001).

⁷³ *NATO Handbook* (NATO Office of Information and Press, Brussels 2001), 177.

the types of vehicle chassis. A multi-purpose vehicle or a vehicle family has the advantage of reducing the amount of CL VII and CL IX supply.⁷⁴

5. Interoperability, Command Control and Communication (C³). Having inherited a C³ system of a different military culture, CEEU armies have difficulties achieving the level of interoperability that the traditional NATO members developed for decades.⁷⁵ Secure digital data and voice transmission will be a crucial capability for being interoperable, just like the deep knowledge of the operational language and procedures of the Alliance.

Evaluating the necessary capabilities for NATO missions, it is conceivable that light forces maybe more suitable for NATO missions as far as the transportability, supportability and cost effectiveness concerned. Unfortunately, it seems that cost is the most important factor for making any decision regarding military affairs in the region as discussed in Chapter 2.⁷⁶ The nature of the light units favors humanitarian and UN Chapter VI missions. Chapter VII and Article V deployments, where security becomes a primary concern need heavy elements. The new NATO members want to contribute to the common efforts, but it cannot take away funds from other areas. Because of these factors, and the commitments made in the Prague Summit, the favored option for most CEEU countries is to train, maintain and deploy small, light units. The ongoing reorganizations will presumably give priority to the light structuring even by sacrificing some heavy organizations. On the other hand, light only units may not be the most suitable force structure for HLD operations.

⁷⁴ This paper uses the 10 classes of supply as established in the U.S. Army instead of the 5 classes standard in NATO.

⁷⁵ *Jane's Sentinel Security Assessment: The Balkans, Central Europe & the Baltic States* (Sentinel House, United Kingdom 2001) 238, 380, 505.

⁷⁶ Excerpt from the speech that LTG Szenes, the new Chief of the General Staff gave during the change of command ceremony 28 Feb 2003: "The ongoing strategic review of the Hungarian Defense Forces indicates that force and organization planning is mainly about the resources. In other words, what and how we can execute within the limits of the MoD budget." Source: <http://www.honvedelem.hu/cikk.php?cikk=12361> .

Necessary Military Capabilities for Homeland Defense Operations

The size of an average CEEU country is 121.000 km, its population is 13 million, and the land has some kind of natural obstacle with a significant defensive value.⁷⁷ The countries are not able to wage a protracted military conflict (war) because of the limited geographical and economical potentials. The sizes of the armed forces even after mobilization are too small for continuous personnel replacement. According to the political slogan, "The homeland defense starts abroad", however the primary defense planning should focus on repelling any kind of offensive action against the nation.⁷⁸ The view, of what is really important regarding HLD planning and preparation changed with the international and regional security environment.

After leaving the Warsaw Pact, the first democratic governments started a large-scale arms reduction to prove that they were not a threat anymore. The political leaderships did not have a concept about the difference between the levels of war therefore, they ordered the elimination of the majority of the 'offensive weapons'. Initially, the civilian leadership introduced the new theory of the circular defense.⁷⁹ It turned out soon that this strategy required too large of a defense force and there was no way that Hungary's economy could maintain such a big force. The Conventional Armed Forces in Europe (CFE) Treaty balanced out the arms reduction issue. However, the situation regarding heavy, armored weapon systems differed even in the CEEU countries.⁸⁰

⁷⁷ The example is based on Poland, Czech Republic, Slovakia, Hungary, Romania, Croatia and Slovenia. The largest one (Poland), is about three times of the average and the smallest one (Slovenia) is about the sixth of the average. Source: www.mapquest.com/europe.

⁷⁸ Quote from the Hungarian Minister of Defense, Ferenc Juhasz Source: www.honvedelem.hu/sajtotukor.

⁷⁹ *Alt/61 Field Manual for the Hungarian Defense Forces, Tactics, Corps and Brigade level* (Hungarian Ministry of Defense, 1993) 17.

⁸⁰ While Poland has recently bought a brigade size inventory of Leopard 2A4 complementing her Mech Heavy and Armor brigades, Hungary has only 3 operational battalions of T-72Bs. Slovakia and Czech Republic is able to further upgrade former Soviet equipment because the former Czechoslovakia had a big arms production industry. Source: *Jane's Sentinel Security Assessment: The Balkans, Central Europe & the Baltic States* (Sentinel House, United Kingdom 2001) 238, 380, 505.

1. Offensive capabilities for being decisive. Small countries have to fight differently than regional and global powers or those nations who have large rear areas and / or are rich in resources. A nation with a size and population of an average CEEU country may have one or two chances to stop and then defeat the aggressor (or hold them until allied reinforcement). This is even truer in case of a more likely offensive with a limited objective (for example an intended territorial gain because of a border dispute) when the seized area provides leverage for future negotiations.⁸¹
2. Defensive capabilities for active and area defense. Smaller armies usually have limited means to achieve attrition; indirect firepower is used more to support maneuver. This is a doctrinal change compared to the past, when both operational and tactical level maneuver units exploited the result of the fires.⁸² Direct firepower and maneuver without significant attrition generally allows modest results (defeat versus destroy).
3. Control of the air space. If air superiority is not achievable, air power has to provide at least freedom of movement and maneuver for the ground forces and deny the enemy the same.⁸³
4. Interoperability with the allies (Same as capability #5 required for NATO operations).

The basic, necessary capabilities for NATO and HLD operations are different. In the case of NATO operations CEEU countries need abilities they currently either do not or just partially possess. Until the armed forces of the region develop these capabilities, certain countries will desire light formations.⁸⁴ On the other hand, HLD operations require another set of capabilities.

⁸¹ Juian S. Corbett, *Some Principles of Maritime Strategy* (Naval Institute Press, 1988) 77.

⁸² *Alt/61 Field Manual for the Hungarian Defense Forces, Tactics, Corps and Brigade* (Hungarian Ministry of Defense, revised edition) 204.

⁸³ *Ibid*, 12.

⁸⁴ The current Hungarian political statements are unambiguous. The cheerfully optimistic liberal view does not see any real threat coming from another nation state, and the real risk factor is named as terrorism, asymmetric challenges, and as 'uncertain security environment'. Source: Collection of all the news articles, interviews, speeches regarding military affairs <http://www.honvedelem.hu/sajtotukor>.

The system that is suitable both for offensive and defensive operations, and presumably has to face being sacrificed in favor of light forces, is called Armor.

Why Armor?

*"Cavalry Syndrome. Anybody who claims the tank has a future is regarded with pitying condescension. They are compared with those benighted souls who fought so hard to keep the horse cavalry."*⁸⁵

Not long after the tank was born, many military and civilian thinkers predicted the obsolescence – the death – of this weapon system. Interestingly, it has not happen so far. The reason may be that there is no other weapon system, which combines four crucial characteristics (firepower, mobility, armor protection, and shock effect) and could be tasked to execute not only force but terrain-oriented missions. Its name is the synonym of tactical decisiveness. The opposition's main counterarguments usually include the praise of high-tech and relatively cheap anti-tank weapons, logistic concerns of the high supply demand (CL III, V, IX), and the negative effect that tank acquisition, maintenance and use have on the budget. Having stated that, the examination will focus on the factors that support and oppose the maintaining of armored forces in the CEEU countries.

Supporting and Limiting Factors in CEEU

Geographic aspects of HLD planning encourage the use of armor in most areas. The Carpathian Mountains have a major effect on the geographical characteristics of CEEU. Slovakia, Slovenia, Czech Republic and Romania are mostly hilly and mountainous in some areas, Croatia half flat half hilly, but Poland and Hungary are mainly plains. The hilly states also have flat parts; 1/5th – 1/3rd size of their total landmass.⁸⁶ The major rivers block both the N-S and E-W cross-country movement. Together with the waterways, the terrain features generally canalize any

⁸⁵ Eden J. Steven, "Three Cheers for Attrition warfare" *Armor* (March-April 2002): 29-31.

⁸⁶ Source: University of Texas Online Service <http://www.lib.utexas.edu/maps/europe/eeurope>

movement to the valleys, passes and to the roads. Because of the population density and heavily cultivated areas, the free space is limited. The Carpathian basin area is endangered because of the yearly floods caused by the melting snow in the mountains, the excess precipitation and ground water. Terrain and weather support tracked cross-country movement except during summertime, when draught dries up the soil and makes several waterways passable. Hilly countries have limited armor presence along the natural avenues of approach, however the rail net of Europe provides an excellent internal line of communication.⁸⁷ Armor units can be transported fast throughout the continent as it happened during WWII. In general, the terrain in the CEEU countries supports the operational use of tanks.

Extensively available *anti-tank weapon systems* may be able to neutralize the effects of armor units. The best-known argument against the tank is the improvement and proliferation of the relatively cheap anti-tank weapons. The tank is a very effective system, the only one, which is capable of penetrating defenses and exploiting into the operational depth of an enemy formation.⁸⁸ The attack helicopter can achieve similar effects, but there is one major difference: the helicopter cannot execute terrain-oriented missions (seize, retain) by its nature, only force-oriented or reconnaissance missions. Because armor units possess the potential to break defenses, repel attacks, destroy fortified areas, execute various maneuvers (different ones in the national doctrines), every single army is keen on having the adequate armor countermeasures.⁸⁹ The anti-armor systems can be mounted, aerial or portable. Portable systems are probably the most

⁸⁷ See Appendix C (Rail network of Europe)

⁸⁸ Matthew Cooper, *The German Army* (Scarborough House, 1978) 115.

⁸⁹ While the U.S. Army has five types of the maneuver (frontal attack, envelopment, penetration, infiltration, turning movement) other armies have different ones. The current Hungarian doctrine differentiates between maneuver with units and maneuver with fires. The maneuver types with units are the following: envelopment, turning movement, the combined use of both and withdrawal. Source: *FM 101-5-1 Operational Terms and Graphics* (Headquarters, Department of the Army, 1997) 1-96 and *Alt/61 Field Manual for the Hungarian Land Forces, Tactics, Corps and Brigade* (Hungarian Ministry of Defense, revised edition) 15.

dangerous ones because they are accurate, have a good range (4000-5000 m) and are difficult to spot and observe.⁹⁰ Despite these facts the statement that tanks became obsolete because of high-tech anti-tank weapons was as groundless as if one said aircraft became obsolete as a result of 4th generation portable surface to air missiles (Stinger, Blowpipe, Mistral, Igla).

The existing *power balance* of the region. Both within and outside the CEEU, armies train, and maintain armor units universally. Although the large quantity of the heavy weapon systems in the region is a result of the Cold War, the CFE treaty created a power balance by maximizing the conventional weapons. Any unilateral reduction could cause a potential risk factor by disrupting this balance within the CEEU.

Up to the present, *military theorists* have had a debate about the most effective armor doctrine and not about the need of the weapon system itself. The highly maneuverable armor forces were a cornerstone of the 'Blitzkrieg' and late 20th century German operations.⁹¹ The Russians mastered the application of Tukhachevskij's, Triandafillov's and Isserson's, early theories and during WWII improved them according to the practical experience.⁹² Since the Red Army focused on armor use at the operational level of war (coming from its quantitative characteristic), it became a significant challenge during the Cold War and both parties piled up heavy weaponry in their inventories. Even the tank designs followed closely the respective doctrines; the difference between the T-55 and the M-60 or the M1 and the T-72/80 is conspicuous.⁹³ The Russian failure of applying sound doctrine in Afghanistan and Chechnya brought unfavorable media to the Armor community implying again that tanks are out of date because armor was not able to achieve decisive victory, not even against irregular forces. In fact,

⁹⁰ Jane's online weapon catalog, ground systems
<http://catalog.janes.com/catalog/public/index.cfm?fuseaction>

⁹¹ Matthew Cooper, *The German Army* (Scarborough House, 1978) 115.

⁹² Maj Alan Mosher, *Light Armor in Deep Operational Maneuver: The New Excalibur?* (Monograph, SAMS USACGSC, 1994) 30.

⁹³ John Stone, *The Tank Debate* (King's College London, UK 2000) 134.

these were the first encounters of regular forces with idiosyncratic opponents.⁹⁴ The conscription based Russian Army was simply not ready for the new challenges. The Russian leadership had to plan the operation in haste and they applied a doctrine that was not feasible for a successful execution.⁹⁵ The argument that blames Russian failure on armor is biased. Nowadays, the absolute advocate of armor development is the Israeli Army: "First of all, armor is a necessity not an option."⁹⁶ Of course, armor is a necessity there because the Israeli Defense Force (IDF) has built its success on tanks from the beginning. What they did was develop a doctrine that emphasized Military Operations on Urban Terrain (MOUT) and kept focusing on the dominant terrain. The demand for a new vehicle resulted in the Merkava series that is really a one of a kind construction; it was built to meet the requirements both in the desert and in the cities.⁹⁷ The fact that countries like Germany, France, Russia, China, and Israel work on their respective future tank design means that these countries have a theoretical basis developed for the future application.⁹⁸ Theoretical considerations support the future use of tanks in the CEEU states, because the tactical and operational use of armor formations (both for offense and defense) is proven in the region. The CEEU countries experienced (and took part in) first the German then the Russian employment of armor forces during WWII. Due to the doctrine of the Warsaw Pact and later of the NATO, different theories exist in the CEEU states. The next task was to develop a feasible, supportable doctrine for contemporary, home defense purposes.

⁹⁴ Major Scott T. Kendrick, *Urban Combat: Is the Mounted Force Prepared to Contribute? ?* (Monograph, SAMS USACGSC, 2001) 25.

⁹⁵ *Ibid*, 27.

⁹⁶ Israeli Officer's View "Operation Jenin" *Armor* (Jan-Feb 2002): 15.

⁹⁷ Written interview with Maj Yaniv Avidan Armor Bn XO of the IDF.

⁹⁸ Janes Land Forces Report 2003, www.janes.com

Changing Doctrine

Since the end of the Cold War, western and U.S. doctrines underwent a series of changes.⁹⁹ The CEEU countries moved from the Warsaw Pact to neutral then PfP and NATO mindset. Doctrine could not keep up with the changes for the lack of both political and strategic guidance.¹⁰⁰ This paragraph provides an overview of how different doctrines integrated armor units and what kinds of possibilities are still open for the future.

The cold war doctrines presumed high attrition rates in case of a clash between 'Red' and 'Blue' parties. It was one of the reasons for the thousands of tanks, IFVs and self-propelled (SP) artillery pieces. The doctrine of the Warsaw pact was offensive in nature. Had the war broken out the socialist block would have carried the war to the western part of Europe. The weapon design clearly showed the offensive characteristics: main armor protection on the front of the vehicles, lighter weight (usually medium class) for speed and mobility, not sacrificing the firepower but the comfort of the crew. Artillery support was redundant on every level. Most of the weapon systems were amphibious or capable of conducting underwater operations with minimum preparation time. The built-in NBC protection enabled the crews and the units to execute missions in contaminated areas.¹⁰¹ The whole doctrine was built on offensive operations; defense was only a temporary solution in order to create conditions for the follow-on attack.¹⁰² The goal of offensive operations was to achieve operational shock by the deep penetration of the first operational echelon and the follow through attack with the second operational echelon that was to exploit the

⁹⁹ *FM 100-5 Air-Land Battle, FM 100-5 Full Spectrum Operations, FM 3.0*

¹⁰⁰ The current Hungarian tactics manual dated in 1993. Although it had some minor updates, the overarching idea does not reflect the changes in organization, training and tactics, techniques, procedures (TTP).

¹⁰¹ Steve Zaloga, *T-72 MBT 1974-1993* (Osprey Military 1993) 37.

¹⁰² *Alt/231 Field Manual for the Hungarian Land Forces, Tactics, Battalion and Company* (Hungarian Ministry of Defense, 1989) 7.

success of the former one.¹⁰³ Fires prepared and supported the attack, and maneuver units had to be able to exploit the effects of the indirect, fixed and rotary wing fires.¹⁰⁴ This concept required overwhelming combat power. Overwhelming combat power may be one of the reasons why the tank was considered to be a weapon of attrition, however the original idea regarded it as a maneuver asset.¹⁰⁵ The employment options provide a clear representation of the versatility of the tank. It is a maneuver system and a weapon of attrition at the same time, support asset for the infantry and light units, can be assigned to execute security and reconnaissance operations, and provides security in military operations other than war (MOOTW).

After the Cold War, the focus turned to the defensive role of the tank. The area defense combined with active defense (defense in sector) became the primary concept utilizing the counterattack and pursuit role of the armor units as well.¹⁰⁶ The events on the Balkan Peninsula in the nineties, presented other options for the use of armor. Task Force EAGLE used heavy formations for security, demonstration, deterrence, mine clearing and lane proofing.¹⁰⁷ In peace operations force protection became a primary concern due to the restrictions of the rules of engagement (ROE). TF EAGLE went to Bosnia to execute a UN Chapter VII mission (the enforcement of the Dayton peace agreement) then transitioned to Chapter VI and used its heavy equipment with a great success. The contrast with that success was Operation Restore Hope. Because of the inadequate protection, the Quick Reaction Force (QRF) was not able to provide

¹⁰³ Ibid, 5.

¹⁰⁴ Ibid, 24.

¹⁰⁵ The original idea for developing the tanks was primarily to break the stalemate of the defenses in the WWI. However it was a limited success, the armor protection and the shock effect proved to be effective and predicted future deployment options. Source: Richard Simpkin, *Tank Warfare* (Brassey's Publishers Limited: London, 1979) 28.

¹⁰⁶ *Alt/61 Field Manual for the Hungarian Land Forces, Tactics, Corps and Brigade* (Hungarian Ministry of Defense, revised edition) 15.

¹⁰⁷ Thomas S. James, Jr.: *Big Tank Little Bridge: Is There a Position on the Peace Operations Team for Heavy Armor?* (SAMS Monograph, USACGSC 1997) 24.

the necessary assistance for TF Ranger until the arrival of the Pakistani mechanized units.¹⁰⁸ The success of TF EAGLE and the number of suffered casualties of TF Ranger prove that force protection and psychological effects are enough reasons to consider the use of heavy armor in Peace Operations.¹⁰⁹

The other area where the role of armor seemed to be controversial was in military operations on urban terrain (MOUT). The Battle of Suez City in 1973 and the Battle of Grozny in 1995 provided serious lessons learned for the combined arms commanders. These urban battles proved that doctrines and TTPs feasible a decade ago might not work in the future.¹¹⁰ However, these battles also proved that it was difficult to develop a feasible doctrine based on prediction and the analysis of similar battles of the past. The U.S. Marines in Hue City, the Israelis in Suez City, and the Russians in Grozny had to transform their organization and change TTPs *while in contact* with the enemy.¹¹¹ After the initial surprise and fiasco armor units were able to adapt to the ambiguous environment and could effectively contribute to the urban fights. The second Chechen War was a good example of adapting quickly to the circumstances. When the Russian armor units provided fire support and covering fire for the leading infantry units, which resulted in those armor units having marginal losses at that time.¹¹² Since the world is becoming increasingly urbanized, future conflicts will predictably happen in an urban environment. The U.S. forces in

¹⁰⁸ Ibid, 22.

¹⁰⁹ "As the Germans found out in WWII, TF EAGLE also knows that Bosnia is not an ideal "tank country". However, the decision to send the First Armored Division to Bosnia, rather than infantry of a mechanized infantry division, has had a profound effect. The awesome presence of a reinforced armored division can leave little doubt in the minds of the Serbians, Croats, and Bosnians that the United States and its NATO allies mean business implementing the Dayton Agreement. A platoon of Abrams tanks and Bradley fighting vehicles at a checkpoint is a strong reminder of the hundreds more that are also quite visible in the camps of the First Armored Division." Ibid, 41.

¹¹⁰ Major Scott T. Kendrick, Urban Combat: Is the Mounted Force Prepared to Contribute? ? (Monograph, SAMS USACGSC, 2001) 43.

¹¹¹ Ibid, 20.

¹¹² Ibid, 29.

Mogadishu, the Russians in Afghanistan, and Grozny discovered that the most technologically advanced and best-equipped force did not always win. These findings initiated the need for appropriate doctrinal solutions where armor would get the role it was due.

Technology

The main difference between the current technological approach and those of the past was that different tactical missions required different technical solutions. Today most armies have a main battle tank (MBT) to carry out a wide variety of tasks. The Germans (and later the Russians, British, and the Americans) developed a concept of using chassis classes for different purposes. The classes (light, medium, heavy) had their own distinctive roles.¹¹³ Light tanks were primarily used for exploiting penetrations and conducting reconnaissance (armored reconnaissance vehicles later replaced them). For these missions light tanks needed great range and speed to achieve deep breakthroughs; the firepower and armor protection were usually sacrificed.¹¹⁴ The main purpose of the medium tanks was to support infantry maneuvers. These tanks had balanced features. The most successful tanks (Pz V Panther, T-34/85, Sherman Firefly) represent this category. The third category consisted of the heavy tanks and assault guns. These vehicles were designed to destroy field fortifications, fortresses, and enemy armor during the penetration. Although these tanks had great firepower armor protection, they were exposed and needed infantry support because of their lack of speed and mobility.

As mentioned earlier, respective doctrines determined the design of the tanks. The three main characteristics (armor protection, firepower and mobility) were in relation and neither one could be altered without sacrificing the other characteristics or the general size, weight and the frame of

¹¹³ Heinz Guderian, *Achtung Panzer!: The Development of Armored Forces, Their Tactics, and Operational Potential* (Arms and Armour Press, 1992) 169-170.

¹¹⁴ Maj Alan Mosher, *Light Armor in Deep Operational Maneuver: The New Excalibur?* (Monograph, SAMS USACGSC, 1994) 20-21.

the weapon system.¹¹⁵ Increasing the armor protection means more steel (or composite material) that adds to the weight. This has a negative effect on the mobility, therefore a stronger, bigger, and heavier power source is needed. If we want to upgrade the armor protection, we have to either sacrifice the mobility or have to accept the growth of the general size and weight. The same concept is true for increasing the firepower or mobility.¹¹⁶ The western armies came out with very sophisticated concepts, the M1A2, the Leopard 2A5, the Challenger and the Leclerc all have great features; they are ergonomic, fightable, and computerized. Their only drawback is the large size, heavy weight (nearly 60 tons), and as a result increased logistic demands.¹¹⁷ The Russian design focused on mobility and firepower sacrificing armor protection that is only significant on the front. The systems (T-64, T-72, T-80, T-90) are not as ergonomic, roomy and fightable as the western tanks but the designers were able to keep its height under 2.4 m and maintain a small frame. With the general use of thermal sights in the modern tanks, the small frame does not provide as big advantage as before (however a smaller target reduces the chance of a direct hit) but the logistic and transportation aspects may promote its future use. The Russian design, the 'T' series with their 41-43 tons weight did not ruin the road structure as much as the bigger constructions, and were built to get over water obstacles with minimal preparation time.¹¹⁸ Both supportability and versatility will be important in the future in the CEEU, therefore these countries may need an option other than the 60 ton behemoths or the Russian T-72s, which were born by the demand of an offensive doctrine of a different era.

¹¹⁵ See Appendix 'D' (Relation of the characteristics in tank design).

¹¹⁶ Richard Simpkin, *Tank Warfare* (Brassey's Publishers Limited: London, 1979) 83.

¹¹⁷ *Jane's Armor and Artillery* (Sentinel House, 1993) 47, 139, 146.

¹¹⁸ Steve Zaloga, *T-72 MBT 1974-1993* (Osprey Military 1993) 25.

CHAPTER FOUR

CONCLUSION, RECOMMENDATION

*"Researchers should balance their daring forecasts, because normally nothing jumps out of nowhere. In the past miscalculations were common, due to one-sided approaches and extreme assessments, and some theoreticians maintained that war could be won by tanks or aircraft alone, or by following one method of fighting, forgetting that a diversity of ways and means are characteristics of any given reality."*¹¹⁹

The purpose of this examination was to identify whether armor will have a vital role the first half of the 21st century in CEEU, or will the currently ongoing worldwide transformations marginalize tanks and armor tactics. The research areas – security, capabilities and technology – deal with the armor issue in its complexity as it appears in the CEEU countries in the beginning of the 21st century.

Conclusion

Security

The new and the joining member countries will not face an easy situation concerning their future security. Contradictory to the primary effort to boost their economy, the military expenditure of the CEEU countries needs to increase (at least 2% of GDP) in order to enable CEEU countries to work together with the more developed western militaries. Although official statements predict a peaceful future in the CEEU, the issues of dispersed nationalities, minorities and historical border disputes do exist under the calm surface. It is easy to take advantage of these problem areas for extremist groups that have historically appeared in the region in cases of declining economies or failing governments. Since the articulated primary threat in Europe (as well as in the whole world) are the failed states, political-religious terrorist plots, and WMD

¹¹⁹ General Gareev M.A, *If War Comes Tomorrow?* (Frank Cass, London 1998), vii.

proliferation, CEEU states may forget about their own backyard during their effort to meet NATO's requirement. In addition, the CEEU countries drastically reduced the size of their respective armies to maintain their financial supportability. The first cutbacks were directed towards the size of the defense forces; the current phase would eliminate those capabilities the civilian leadership still considers a legacy of the Cold War. The heavy forces are one of these. The additional argument from the political side is that NATO needs certain capabilities not 26 individual, full armies. With this concept, some CEEU countries rely exclusively on Article 5, for mutual assistance. As the countries of the region identify different risk factors, their approach to the reorganization of the Armed Forces might be different, too. While Poland purchased a Brigade size Leopard-2 formation, Hungary, as a result of its strategic review of the Armed Forces may keep a T-72 battalion. The downsizing of the armies and eliminating certain capabilities is very debatable. Every force building and reorganization has to consider the experiences of the past, the interests of the present and the possibilities of the future. Its relations with the West, with the East and its internal relations determine the security status of the CEEU. The unpredictability of Euro – Atlantic relations and the differences in their interests make the future of the NATO questionable. In the East, there is a struggle for power and resources. Internally, the experiences of the past and the possibilities of the future do not necessarily support a bright future, because the EU enlargement (that would ultimately take care of the border disputes and minority issues) may proceed too slowly to act as a driving force for future security goals.

This is not a good time to go light, especially when the average size of an Army in the CEEU is about 45 thousand (except Poland and Romania). The capabilities of a state have to support both its strategic posture and its responsibilities of the alliance of which the state is a member.

Capabilities

CEEU countries need different capabilities to participate actively in NATO missions and execute HLD operations. Although the newly created slogan states that the HLD starts abroad, it does not mean more than isolating conflicts close to or far from the CEEU before they could escalate and reach the homeland. Conceivably, this power projection needs a different force than an area or an active defense in case of a hostile, high intensity conflict violating the homeland's sovereignty. As small countries are not able to wage protracted war or a war of attrition, the only option is the conduct of combined arms operations knowing, that the resources of the country would not allow lengthy operations. Considering the fact that in all geographical directions, every single country around the CEEU possesses heavy forces, (and by their nature they are the most suitable for offensive operation) the optimal solution is to maintain the balance of the heavy forces. The tanks need to stay in the region until the cheerful predictions of the European leaders come true and all nations slowly get rid of their heavy equipment.

Technology

The tank design that the CEEU countries will chose in the future depends on the doctrine they apply. Terrain and infrastructure favors medium tanks, however it is unthinkable today for NATO members to purchase Russian equipment. In addition, currently it is hard to maintain the continuous CL XI, CL V supply from the CIS for the existing inventory purchased from the Soviet Union in the past. Another consideration is that the Russians only sell the 'export version', which is usually inferior to the original version. Last but not at least, a tank with purely offensive characteristics may not be suitable for CEEU purposes. The only current option is the acquisition of a western model. However, a small country like Hungary, Slovakia, Czech Republic or Slovenia may not be able to afford these models, because the logistic support (new types of CL III, CL V, CL IX, maintenance, training for the maintenance personnel, buildings and vehicles for the new standards) would cost more than the actual weapon systems even if only a brigade or

similar size unit were purchased. Interestingly, the smaller unit would be bought the higher the relative cost of such a support would be.

Recommendation

The recommendation primarily regards Hungary and the CEEU countries of its size. Hungary has been reorganizing its forces since 1989. The country is representative of similar organizational changes in the region. In 1989, the Hungarian Defense Forces had about 120,000 personnel and in 2003, the defense forces numbered 45,000. The quantity of the tanks decreased from 1600 to 800 but only three battalions are operational (3x58 tanks).

Security

The current European inventory of heavy weapon systems clearly shows that most countries still possess these systems in such numbers that is relevant to their respective threat assessments. Although the quantitative reduction of the heavy armor is observable in CEEU, this reduction is either executed because of qualitative changes (for upgrading, or purchasing more modern systems) or it is a sign of a general decreasing of national armed forces.

Armor forces are far from being outdated. The Second Gulf War is currently proving that a feasible solution against the heavy, conventional armor threat is more, better-equipped, and better-trained armor units. It is equally true in the CEEU, where WWII and the Cold War established and maintained a strong culture of the armor branch throughout the region. The ultimate security solution – the integration of all European nations to the EU is a very long (maybe a century-long) process. Until this stable state of security is achieved, it is important to keep the existing power balance of the CEEU. The current, primary means of security in the CEEU is NATO but it is short-sighted to rely on Article 5 in the long term because of the ambiguous future of the Alliance. Having said that, armor forces are to have a double role in the region. First, armor units are HLD assets because tanks are essential for repelling an offensive,

counterattack then pursue the aggressor in order to push him back outside the border in concert with other arms. Second, heavy forces are more effective contribution to the common NATO defense than light infantry, CS, or CSS units are. As Europeans (and of course, the CEEU among them) are about to finally take over the Balkans, 'the light contributors' may find out the importance of security and deterrence that armor provides in MOOTW.

The future combat capabilities have to cover all the areas identified by the security assessment.

Capabilities

The two, major capability groups (HLD, NATO) has to merge at some point. It will not work to go in two different directions. The security trend indicates that the current focus is on NATO capabilities, while the assets needed for HLD operations are neglected. The two groups have certain connection points such as interoperability issues, NBC protection, and C³. It would be worthwhile to develop those capabilities first that are equally important for both groups. The next step could be the merging process by making the HLD assets capable to fully contribute in NATO operations and integrate the capabilities designed specifically for NATO contribution into HLD operations. Although a small CEEU country with a size of territory and Army similar to Hungary may not need to transport large formations to the other side of the globe, tanks and other heavy systems like IFVs and SP artillery pieces are necessary to provide security and fire support for the infantry units both in high and low intensity conflicts.

The two groups of capabilities need to be developed further in a manner, which maintains and enhances their symbiotic characteristics. The goal needs to be to have one set of capabilities that is versatile enough to provide planning and executing framework for both HLD and NATO operations.

Technology

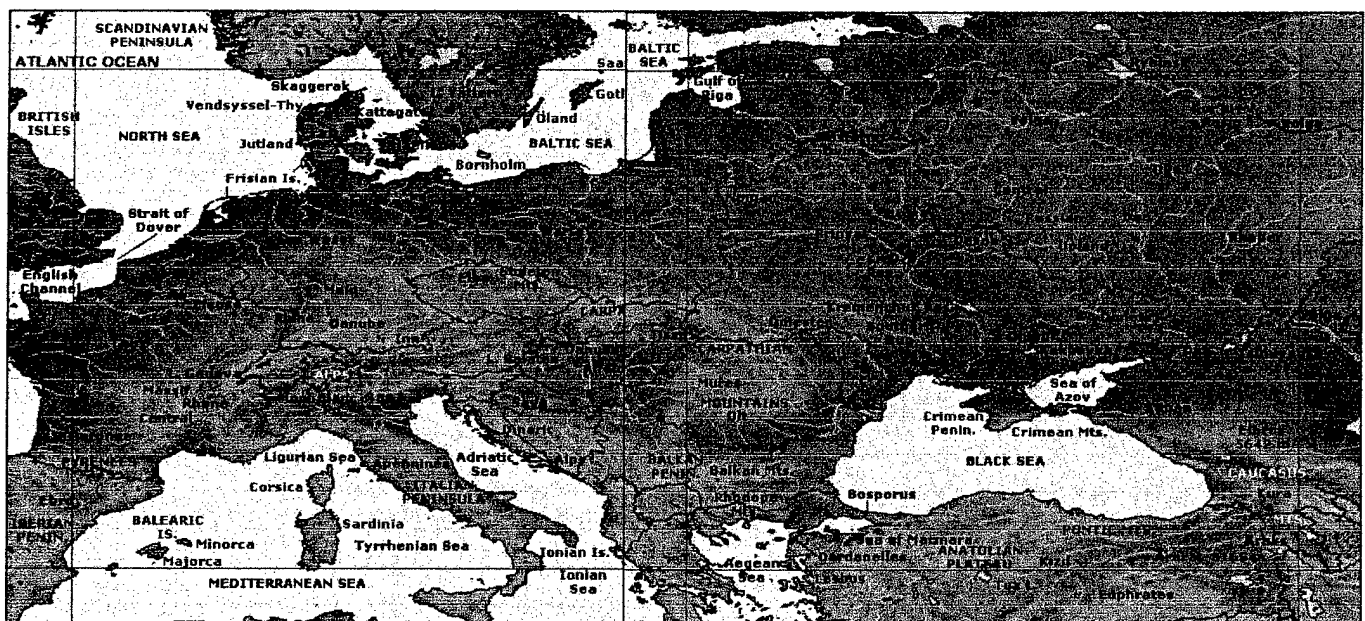
Needed capabilities should drive tank design in the future. Since the threat has changed from a Cold War-type massed armor formation to a more flexible but still ambiguous model, the doctrinal changes will probably emphasize the versatile side of a lighter weight tank. For the CEEU countries, there are not too many options at present. Technological change is necessary, but it is a double-edged sword. With the adoption of any western model, the respective army would get a high-tech, competitive weapon system but it would come with very high maintenance and training costs, and with the wear of the infrastructure. Another option would be the purchase of a high-end Russian design (T-80 UB) that fits more to the European terrain, infrastructure, and a very smooth transition from the analog to the digital technology. Because of political considerations, this option is very unlikely. In the long run, the CEEU has to come up with its own tank design that fits the needs of the region. A medium-light weight, diesel powered design can be envisioned, with superb maneuverability and firepower. The developers can make up the sacrifice on armor protection with modular, add-on armor. The chassis could be a base for a (relatively heavy 20-40 ton) vehicle family, because effective and efficient artillery and engineer systems also can be developed successfully in that weight category. The core of the weapon system would be a 105-120mm rifled barrel, with thermo vision optics, laser range finder and computerized target acquisition. It is important to keep the electronics very simple and make an analog backup system for each operating block. The project has to consider the lessons learned of the western, the Russian and especially the Israeli tank design. The IDF constructed the Merkava in such a time and place where MOUT was not an exception but the general way of the fight.

Although it currently collides with the national economic interests, there might be also a common European tank design in the future in order to counter the threat the European Union has to face. While tanks remain in the inventory of those countries that can possibly be a threat to the

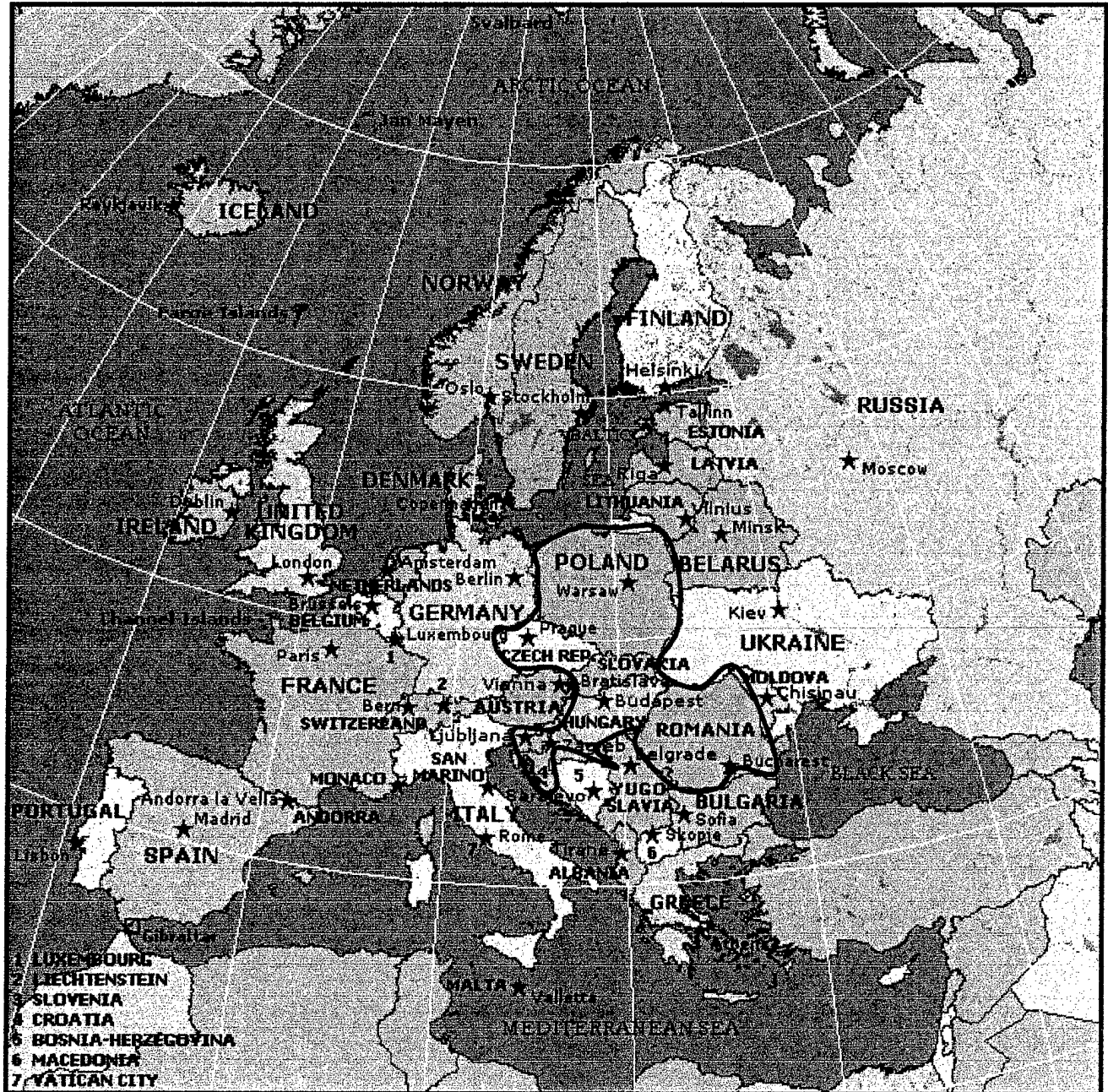
democratic, western values, the friendly side has to maintain its answer to that. There is nothing better that can counter enemy armor than a highly trained and motivated crew of a fast, maneuverable, protected, and lethal tank.

APPENDICES

APPENDIX 'A' - The Geographic Map of Europe



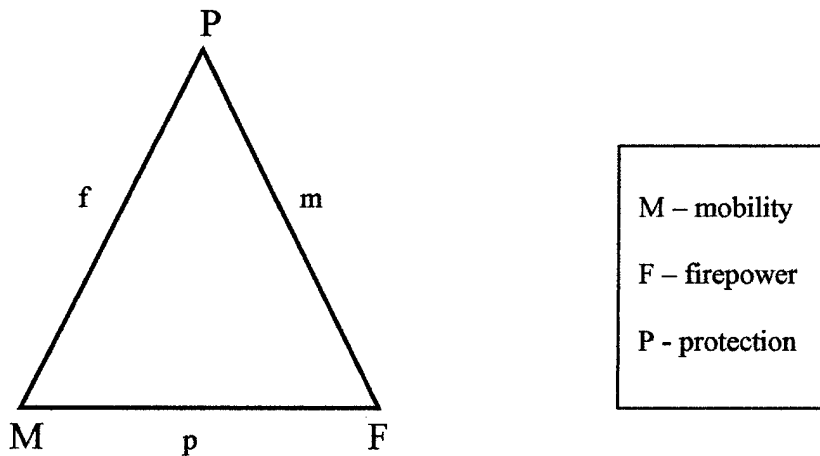
APPENDIX 'B' – The CEEU



APPENDIX 'C' – The Rail Network of Europe



APPENDIX 'D' – Relation of the Characteristics in Tank Design



Each corner of the equilateral triangle stands for a major characteristic. One of the properties of an equilateral triangle is that the perpendicular distances from the three sides of any point within the triangle always add up to the same amount, which can be called unity or 100%. If the perpendicular distances from the side (base line) towards the corner it will represent the priority rating of each characteristic. Then any point in the triangle will define a particular design of the tank.

- The center mass (0) equidistant from each side represents the most balanced and versatile design.
- The mid point of the mobility base line so that firepower and protection are each 50% and mobility 0, represents a balanced design of a pillbox.
- Any point along the side 'f' represents some kind of mobile shelter.
- Any point on the line 'p' is an unarmored self-propelled mounting.

Source: Richard Simpkin, *Tank Warfare* (Brassey's Publishers Limited: London, 1979) 82.

BIBLIOGRAPHY

Books

- Cooper, Matthew. *The German Army*. Scarborough House, 1978.
- Columbus, Frank. *Central and Eastern Europe in Transition*. Nova Science Publishers, Inc Commack, New York 1999.
- Dawson, Andrew H. *The Changing Geopolitics of Eastern Europe*. Frank Cass, London 2002.
- Edward N. Luttwak. *The Israeli Army*. University Press of America, 1983).
- General Gareev M.A. *If War Comes Tomorrow?* (Frank Cass, London 1998), vii.
- Guderian, Heinz. *Achtung Panzer!: The Development of Armored Forces, Their Tactics, and Operational Potential*. Arms and Armour Press, 1992.
- Huntington, Samuel. *The Clash of Civilizations and Remaking of World Order*. New York: Touchstone Books 1996.
- Juan S. Corbett. *Some Principles of Maritime Strategy*. Naval Institute Press, 1988.
- Simkin, Richard E. *Tank Warfare, An Analysis of Soviet and NATO Tank Philosophy*. London: Brassey's Publishers Limited, 1979.
- Stone, John. *The Tank Debate*. King's College London, UK 2000.
- Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations*. 6th ed. Chicago: University of Chicago Press, 1996.
- Zaloga, Steve. *T-72 MBT 1974-1993*. Osprey Military 1993.
- Wright, Patrick. *Tank -The Progress of a Monstrous War Machine*. Viking, 2002.
- _____. *Alt/231 Field Manual for the Hungarian Land Forces, Tactics, Battalion and Company*. Hungarian Ministry of Defense, 1989.
- _____. *Alt/61 Field Manual for the Hungarian Land Forces, Tactics, Corps and Brigade*. Hungarian Ministry of Defense, revised edition 1993.
- _____. *European Security and NATO Enlargement*. Strategic Studies Institute, US Army War College 1998.
- _____. *Federalism and Decentralization*. George C. Marshall European Center for Security Studies, 2002.
- _____. *FM 100-5 Air-Land Battle*.

- _____. *FM 100-5 Full Spectrum Operations*.
- _____. *FM 3.0 Operations*.
- _____. *Jane's Sentinel Security Assessment*. Sentinel House, United Kingdom 2001.
- _____. *Joint Publication 1-02 Department of Defense Dictionary of Military and Associated Terms*. CD-ROM, Joint Electronic Library, 2000.
- _____. *NATO Handbook*. NATO Office of Information and Press, 2001.
- _____. *NATO after Enlargement: New challenges, New missions, New Forces*. Strategic Studies Institute, US Army War College 1998.
- _____. *Russian National Security: Perceptions, Policies and Prospects*. The U.S. Army War College, 2001.

Periodicals

- Foss, Christopher F. "Modernisation Points Way to Future MBTs". *Jane's Defense Weekly* (June 1997): 23-26.
- Michael Mandlebaum. "Foreign Policy as Social Work" *Foreign Affairs*, Vol LXXV, No.1, January-February 1996.
- Ludvigsen, Eric C. "Armor's Future: From One, Many". *Army* (May 1991).
- Melton, Stephen. "Future of Armor". *Armor* (May-June 1990).
- Morningstar, James K. "The Bugle Calls: Armor on the Modern Battlefield". *Armor* (May-June 2002).
- Peters, Ralph. "The Future of Armored Warfare". *Parameters* (Autumn, 1997).
- Riggs, William S. "Global Cavalry". *Armor* (Mar-Apr 1998).
- Steven, Eden J. "Three Cheers for Attrition warfare". *Armor* (March-April 2002).
- Sun Tzu. *The Art of War*. (Oxford University Press 1985).
- Weisberg, Jacob. "Crushed velvet: Vaclav Havel's velvet revolutions." *The New Republic*. 1990, vol. 202 #10.

Monographs, Theses, Studies

- James, T.S. "Big Tank Little Bridge: Is There a Position on the Peace Operations Team for Heavy Armor". School of Advanced Military Studies, Fort Leavenworth, Kansas, 17 December 1996.

Kent, D.B. *"Future of the Tank"*. Army War College, Carlisle Barracks, Pennsylvania, 5 April 1991.

Malone, J.T. *"Armor in Military Operations Other Than War: An Effective Employment Option"*. Army Command and General Staff College, Ft Leavenworth, Kansas, 7 June 1996.

Major Kendrick, Scott T. *Urban Combat: Is the Mounted Force Prepared to Contribute?* Monograph, SAMS USACGSC, 2001.

Maj Mosher, Alan. *Light Armor in Deep Operational Maneuver: The New Excalibur?* Monograph, SAMS USACGSC, 1994.

Matheny, MAJ Michael R. *"Armor in Low Intensity Conflict: What is the Best Tactical Doctrine for Armor in Counterinsurgency?"* School of Advanced Military Studies, Fort Leavenworth, Kansas, 7 December 1987.

Online sources

<http://www.fas.org>

<http://www.honvedelem.hu>

<http://www.janes.com>

<http://www.gallup.hu>

<http://www.mapquest.com>

<http://www.mti.hu>

<http://www.nato.int>

<http://www.nyu.edu>

<http://www.lib.utexas.edu>

Interviews

Written interview with Maj Yaniv Avidan Armor Bn XO of the IDF.

Telephone interview with BG Tibor Nagy, the former commander of the 25th Mech Inf Bde (HU).

Personal interviews with International Officers studying in the CGSC.

Interview with Col. Rainer Waelde, Advanced Operational Art Studies Fellow, German Army.